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Wednesday, March 05, 2008

Logical emergence of money from barter

The ever entertaining and informative Mencius Moldbug presents a useful but flawed account of the logical origins of money. By "logical origins" he means the following:

> The basic problem with Menger's approach, from my perspective, is that he's concerned with the *historical* origin of money, whereas I am concerned with its *logical* origin. What Menger wanted to know is how money actually happened. What I want to know is how it *can* happen.

Whatever his intentions, Menger's account today has much more value as a logical than a historical account of the origins of money. Thanks to modern archaeology we now know that money (or at least goods that before the rise of coinage were valued primarily as intermediate goods, which I call "collectibles", the main example being bead jewelry) emerged long before the efficient markets that Menger assumes. Humankind thus did not, with the exception of certain short and exceptional situations during the colonial era, ever pass through a stage of efficient barter markets that is Menger's setup. Indeed so long ago (more than 100,000 years ago) did collectibles start being used that they probably played an important role in the evolution of human cooperation, as I describe here.

But let's get back to the logic of whether and how money will emerge in a voluntary and efficient barter market. Moldbug first gives a great description of why money is not like a normal commodity:

> ...since buying and selling any good cannot fail to affect its price - ie, its exchange rate against other goods - we have a feedback loop. The herd selects an intermediate good based on its predicted exchange rate. But the exchange rate cannot be predicted without knowing the herd's selection. Problem!

Moldbug describes his setup world of Nitropia, in which the storage and transport costs on which Menger based his analysis are eliminated:

> anyone can trade with anyone, anywhere, by teleporting goods. In addition, we'll assume that all goods can be stored perfectly without any overhead.

Moldbug calls this an equilibrium where there is no money, just barter. I don't agree -- given the mental transaction cost assumption (see below), money could emerge even here, in the complete absence of storage and transport costs. I'll explain why below.

Moldbug then breaks this barter equilibrium by introducing a good with a storage cost, fish, which rots if not soon eaten. Sven the

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fisherman wants to fish, sell the fish, save the income, and when he's saved up enough buy a Cadillac.

Moldbug claims that this eliminates the coincidence-of-wants problem from his scenario, but I don't buy it. A coincidence of wants problem is just what we have here: customers want to eat the fish while it's still fresh but Sven does not want to purchase the Cadillac until he has saved up enough income for it (he apparently prefers delaying gratification to incurring the interest costs of credit).

Since the storage and transport costs of intermediate commodities are still zero, these provide no reason for Sven to choose one particular such commodity over another as a currency. But because as Moldbug says, "[t]ranslating between standards is a pain in the butt," out of these intermediate commodities a single monetary standard will emerge. In other words, Nitropia assumes transaction costs that create an incentive to converge on one currency. Since Nitropia has costless storage and transport, this is just what I have called mental transaction costs -- the costs involved in making buying and selling decisions. These include the costs of keeping books and otherwise tracking and comparing prices, and the costs of mentally mapping preferences to budgets via prices.

But mental transaction costs are a problem even if there are no commodities like fish with storage costs. A world of pure barter has O(N^2) prices for N commodities, and the mental transaction costs in such a world are correspondingly much higher than a world with a single currency and O(N) prices. So even a market with no transport or storage costs for any commodity whatsoever, but with sufficiently high mental transaction costs, will converge on a single currency.

Not even the elimination of all storage and transport costs eliminates all coincidence of wants problems. If Sven's customers want the fish Sven caught today because they are hungrier today than they expect to be ten years from now, they will prefer to buy it today even if Sven could costlessly store the fish to be sold with equal freshness ten years from now. Even with zero storage and transport costs, time preferences for production and consumption create noncoincidences of wants, and these mismatches combined with mental transaction costs give rise to a currency standard.

> Menger's analysis does not and cannot show that the coincidence-of-wants effect is the only force that can result in standardized money. Perhaps there is another? Indeed there is.

I disagree. What Moldbug's argument, properly corrected, shows is that some of the costs that arise from the noncoincidence of wants occur even if there are no transport or storage costs, but only mental transaction costs. This contrasts with Menger's analysis, which defined the costs caused by the coincidence wants in terms of transport and storage costs.

> Suppose Sven is choosing between only two possible intermediate goods - Ia or Ib. Say Ia is palladium, and Ib is rhodium. What is Sven's algorithm? It's actually quite simple. All Sven cares about is the change in the exchange rate between palladium and rhodium, across the time window T1 - T0 of the transaction. If (Ia/Ib)@T1 is greater than (Ia/Ib)@T0, he prefers palladium. If it is smaller, he prefers rhodium. In other words, he will prefer the I which will appreciate more across his monetary time window...
>
> [Now consider a population of Svens, each choosing an intermediate commodity]. Let's separate this herd into two strategies, by eye color. If Svens have blue eyes, they follow their proper MBA reflexes and diversify, buying equally priced lots of palladium and rhodium. But if they have brown eyes, they buy only rhodium.
>
> Who does better? The brown-eyed Svens. Why? Because [the introduction of a commodity that can't be costlessly stored [but as I observed above this is not really necessary; what we need to introduce are coincidences of wants and mental transaction costs -- NS]] has created new demand for both palladium and rhodium. There was no monetary demand before we broke the equilibrium - now there is. Ceteris paribus, the price must go up.

Rhodium emerges as our standard, its price reflects its value as money on top of its value as an industrial commodity, and the price of palladium goes back to its mere value as an industrial commodity. Given the vagaries of markets, our blue-eyed MBAs would have

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bought palladium too high (anticipating the possible increase in its value as money if it would have become a monetary standard) and sold too low (as glut and bust will follow this monetary bubble), while the brown-eyed colluders reap the full benefits of investing early in the money standard that actual emerged.

But if we take this analysis further, our blue-eyed MBAs don't come off nearly as bad as Moldbug's scenario suggests. If mental transaction costs, in addition to storage and transport costs, are sufficiently low there is no convergence on a single currency, because in a world of sufficiently unpredictable and volatile prices and risk aversion a party indeed benefits from stockpiling multiple currencies, just as they teach MBAs about investments.

In Moldbug's competition of blue eyes versus brown, the dice were loaded: the agreement between brown-eyed Svens to standardize on rhodium, and the lack of any attempt to set up a competing standard, allowed parties who knew about the agreement to predict ahead of time which standard would win. If the outcome is significantly predictable, it pays to invest completely in the most likely winner. But let's add a third group: green-eyed Svens that use just palladium as their intermediate commodity. Green and brown eyes being of the same expected financial size (or of a completely unpredictable financial size), there is a 50% chance that palladium and green eyes will win, while brown eyes lose everything (except the original non-monetary value of the commodity, presumably negligible), and 50% chance of the reverse. For the blue eyes, if they diversified evenly it's basically a wash. The risk-neutral expected value of all three groups is the same, but if our players are risk-averse our blue-eyed MBAs have the strategy of highest expected value. 50/50 diversity is thus the optimal initial position when it cannot be predicted which of two commodities will gain value as money. But since it's impossible to discover a perfect 50/50 diversification, and mental transaction costs are sufficiently high, the equilibrium is unstable and will coverge to a single currency. Once one commodity starts to be favored, the optimal strategy is to move to that currency. So we have shown that sufficiently high mental transaction costs are sufficient to cause the emergence of a currency standard, even in the absence of storage and transport costs.

Reminder: we are neglectling coercive means such as legal tender laws and operating in a completely voluntary market. But Moldbug's scenario also explains why larger governments usually end up controlling the currency, even in the absence of legal tender laws. Markets will tend to standardize on whatever the dominant transactor, the party that controls the largest plurality of cash flow, standardizes on, and in most historical societies the dominant transactions were tax collection and the payment of those taxes to soldiers. More recently government bonds and even more recently welfare payments have joined the fray, biasing the outcome still further. By standardizing on its own currency, a large government can gain revenue from an "inflation tax." This process is far easier for the government with a fiat currency than a currency based on natural unforgeable costliness (such as a precious metal). Before the advent of modern currencies, inflation and the resulting revenue could only be obtained tediously via the slow substitution of less scarce for more scarce metals in the government coinage. With paper the physical process is trivial, and only the matter of how the new money enters the economy is at issue.

All the foregoing assumed sufficiently high mental transaction costs. This has been the historical norm, because trying to shop or otherwise do business in a world of multiple currencies, much less of pure barter, has always led to confusion, error, and overly complex accounting, and would do so even given the costless teleportation of Nitropia. But with sufficiently low mental transaction costs and sufficiently unpredictable exchange rates, it pays to hang on to multiple currencies, and a world of multiple currencies is the equilibrium. At the extreme of zero mental transaction costs, zero storage costs, and zero transport costs, we have a pure barter market, with no need for money at all.

Now for a more radical claim: in some cases, computers can drastically reduce the mental transaction costs of comparing prices in multiple currencies, which along with the "costless teleportation" of online markets allows multiple currencies or in some cases even barter to become the equilibrium. I'm quite a bit more fuzzy on just what those circumstances are, or just what software with what user interfaces said computers must be running, but you can see some of my ideas here and here. The general idea is that most of the mental costs of mapping of preferences to budgets via prices, in order to make buying or selling decisions, are offloaded onto a software agent, via a user interferface and a complier that translates high-level preferences to detailed "binary" contracts.

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Posted by Nick Szabo at 4:08 PM

10 comments:

Mencius Moldbug said...

But Moldbug's scenario also explains why larger governments usually end up controlling the currency, even in the absence of legal tender laws.

Excellent observation. Governments have way more than enough power to flip these multiple equilibria around - all other things, of course, being equal.

Moldbug claims that this eliminates the coincidence-of-wants problem from his scenario, but I don't buy it. A coincidence of wants problem is just what we have here: customers want to eat the fish while it's still fresh but Sven does not want to purchase the Cadillac until he has saved up enough income for it (he apparently prefers delaying gratification to incurring the interest costs of credit).

Extending the coincidence-of-wants metaphor to include temporal conflicts is a pretty significant extension of the Mengerian model - I'd say you're stretching the term beyond its usefulness.

And the Cadillac is really not relevant to Sven's key problem, which is that he wants to transfer the exchange value of the fish from today into the future. Once he exchanges his fish for a monetary good of some kind, he has bartered into the monetary system and exerted his positive influence.

But because as Moldbug says, "[t]ranslating between standards is a pain in the butt," out of these intermediate commodities a single monetary standard will emerge. In other words, Nitropia assumes transaction costs that create an incentive to converge on one currency. Since Nitropia has costless storage and transport, this is just what I have called mental transaction costs -- the costs involved in making buying and selling decisions.

Whoa, wait a second. This is not gedankenexperiment fair play.

The point of the thought-experiment is to establish that even in the absence of transaction costs, there is another force for monetary standardization. Saying "but there are transaction costs, even in Nitropia" is like objecting to an explanation of the relativity twin paradox by saying that there are no spaceships which can travel at 0.9c. It is true - but it is not relevant to the point of the gedankenexperiment.

8:30 PM

nick said...

Extending the coincidence-of-wants metaphor to include temporal conflicts...

A temporal conflict of the kind you described obviously implies a lack of coincidence. It readily gives rise to the need for an intermediate commodity rectify the lack of coincidence in a way that minimizes storage, transport, and mental transaction costs. It certainly seems quite useful to treat *any* non-coincidence, whether temporal or absolute, the same way if there is no compelling reason to distinguish them, as indeed there is not here.

The point of the thought-experiment is to establish that even in the absence of transaction costs, there is another force for

monetary standardization. Saying "but there are transaction costs, even in Nitropia" is like objecting to an explanation of the relativity twin paradox by saying that there are no spaceships which can travel at 0.9c.

No, it's like objecting to an analysis of the twin paradox at 1.1c when an already stated assumption is that you can't go faster than 1.0c.

What kinds of costs are "pain[s] in the butt" caused by lack of standards, if not transaction costs? I and many other economists use "transaction costs" as a catch-all category to refer to just these kinds of costs that are not captured by some more specific economic category of costs. However vaguely you did it, you invoked a transaction cost as one of your assumptions.

All you have proven is that money can still be necessary in a world without two particular kinds of transaction costs, namely storage and transport costs. That doesn't prove anything about whether money would arise without transaction costs generally.

Indeed, quite clearly we would not need money if we could barter in a perfectly efficient market, i.e. a market with no costs or "pain[s] in the butt" of any kind.

In any case, I did not make the idea of mental transaction costs up just now to try to dump on your gedankenexperiment. They really are central to explaining money. They were central to my now widely accepted explanation of why micropayments generally fail. They correspond quite closely to your vague reference to "pain[s] in the butt" caused by having to track prices in multiple currencies. Which is why I brought this assumption out into the open and formalized it in terms of mental transaction costs being, even in the absence of storage and transport costs, sufficient for the emergence of money.

In other words, it's just not the case that in *any* market money is needed or will arise. It requires what you call the "pain in the butt" or what I call signficant enough mental transaction costs to warrant it. Indeed, as I've described it may be possible in some cases to use computers to minimize to insignificance the "pain[s] in the butt" caused by multiple prices, and thus create barter markets in which money is not needed.

Indeed, this almost surely actually happens in certain narrow ways in the computerized arbitrage that occurs in modern commodity markets. Furthermore, the value of money in reducing mental transaction costs, storage costs, and transport costs also explains why the price of a commodity used for one or more of these monetary functions, including obviously gold but also importantly most other commodities that can be traded with low transaction costs, is often far higher than the price that would be predicted merely from the industrial supply and consumption demand for that commodity. This is of basic importance in, for example, explaining the prices on modern commodity markets, as I explain here.

4:45 PM

Mencius Moldbug said...

*It certainly seems quite useful to treat *any* non-coincidence, whether temporal or absolute, the same way if there is no compelling reason to distinguish them, as indeed there is not here.*

But there is - simply because I am working from the background of the Mengerian analysis, and Menger is only concerned with synchronous coincidences.

Moreover, time is always an exceptional dimension. We can move goods north, east, south and west. But we cannot teleport them back in time, not even in Nitropia.

All you have proven is that money can still be necessary in a world without two particular kinds of transaction costs, namely storage and transport costs. That doesn't prove anything about whether money would arise without transaction costs generally.

What I've done is to explain that there is a second effect, besides the Mengerian effect created by transaction costs, that tends to cause the standardization of money.

If you throw an apple at the ground, it will hit the ground. This does not demonstrate the nonexistence of gravity. There are two effects that cause the apple to move downward: the inertia imparted by the throw, and the acceleration due to gravity.

These effects are orthogonal and coincident. Gravity still accelerates apples which have been thrown at the ground. And in a gravitational frame, you can still throw apples at the ground. Nonetheless, it is often easiest to explain inertia in a world without gravity, and easiest to explain gravity by simply dropping the apple.

So: please observe that nothing in my analysis assumes the absence of transaction costs. I constructed an unrealistic world in which transaction costs are negligible not because I wanted to describe an effect which exists only in the absence of transaction costs, but because I wanted to describe an effect which is not dependent on the presence of transaction costs.

If you think the effect I describe is dependent on the absence of transaction costs, I'd be curious to see you explain why. Otherwise, I admit that this nuance could have been much clearer. I must thank you for prying out the point.

Indeed, in the real world - which certainly does have transaction costs, both mental and frictional - we see both forces at work.

That is, we see multiple goods which take the monetary role in the pattern of indirect exchange. The exchange rates between these goods are clearly explained only by their popularity as monetary goods.

For example, if gold was not used as an indirect medium, its exchange rate against the dollar would certainly be much lower. And over the last five years, Svens who chose to hold gold have done much better than Svens who chose to hold dollars (or dollar securities).

Yet this effect cannot be explained in Mengerian terms alone, because all Mengerian effects favor official currencies - especially the dollar, which is the de facto international exchange standard. Whereas gold is used nowhere, or at least hardly anywhere, as a Mengerian medium of exchange. Yet it retains a monetary premium, or at least seems to, which is the effect I sought to explain.

1:46 PM

nick said...

I constructed an unrealistic world in which transaction costs are negligible

You did no such thing. As a quite necessary assumption of your analysis you introduced as one of the properties of Nitropia a vaguely worded "pain in the butt", which more thoughtfully put is the problem of keeping track of prices in multiple currencies or barter, a part of mental transaction cots. As I have described, these mental transaction costs give rise to the need for money. Burying such assumptions and later ignoring them leads to lack of understanding.

To repeat myself quite clearly: in a perfectly efficient market, in other words in a market where transaction costs are negligible, there is no need for money. Your account, utterly dependent on an assumption of mental limitations which quite clearly create a cost of transacting, and thus falling far short of describing the economists' perfectly efficient market, does quite the opposite of disproving this claim. Indeed, my critical analysis of your account reconfirms it.

Whereas gold is used nowhere, or at least hardly anywhere, as a Mengerian medium of exchange. Yet it retains a monetary premium, or at least seems to, which is the effect I sought to explain.

I don't recall that you succeeded in describing how gold is now used, as a store of value and as a transaction hedge (the latter being a kissing cousin of use as a medium of exchange). As are many other commodities during times when major fiat currencies are being inflated, as I have described.

As for why gold itself is not used more often directly in contracts, the primary reason is almost surely legal. The UCC and common law in the US, and to a lesser extent CISG and its cousins internationally, have rules that tend to assume the standard transaction is an exchange of goods or services for government-issued money. Barter, which use of gold in a contract would for most legal purposes

be considered to be, puts transactions in often often obscure legal categories and often leads to strange legal results. Negotiable instruments "denominated" in gold usually cannot be enfored in the same ways. Domestically, large-scale barter often encourages tax audits. The lowering of currency exchange barriers has eliminated much of the old practice of barter in international trade.

Another probable reason is that for reasons of accounting stability companies tend to favor contracts in currencies in which most of their other credits and debits are denominated.

The result is that contracts are made in fiat government currencies, in order to take advantage of standard commercial laws and keep accounts stable. Where the currency inflation risk over the lifetime of the contract is high enough, as it often now is, and the currency risk of assets on the books is not already hedged by liabilities, gold (and many other exchange-traded commodities) are used to hedge the risk. Exchange-traded commodities, especially those with less elastic supply curves over the lifetime of the contract, are thus, in times of inflation, indirectly used as a medium of exchange.

1:56 PM

Mencius Moldbug said...

As I have described, these mental transaction costs give rise to the need for money.

As can any transaction cost. Nowhere have I denied or attempted to refute the Mengerian effect.

To repeat myself quite clearly: in a perfectly efficient market, in other words in a market where transaction costs are negligible, there is no need for money.

You can repeat yourself as many times as you like, and as clearly as you like. This is not a substitute for argument.

I described an effect in which monetary standardization is the result of a pattern of subjective rational decisions which are not dependent on transaction costs.

Please feel free to try to refute this effect. Please feel free, also, to show that this effect is in reality dependent on transaction costs. Please note that, by acknowledging that such "negligible" costs exist even in any realistic Nitropia, I was not asserting a dependence on the existence of such costs, but asserting a lack of dependence on their nonexistence.

However, neither the existence of standardization effects which are the result of transaction costs, nor the practical difficulty of eliminating all transaction costs, whether to some epsilon or to true zero (I refuse to debate the meaning of the word "negligible") constitutes any such refutation.

I would caution you, also, about phrases like "need for." This seems to pull in non-Austrian concepts in which monetary standardization occurs because a world with money is better than a world without money. The Calvinist Providence and other forms of historical determinism lurk in the background of this usage, which is the slippery slope to chartalism. I am fairly confident that this is not what you mean, but it never hurts to not imply it.

Menger did not identify an objective, aggregate "need for money." He identified a subjective pattern of exchange which led, in the aggregate, to monetary standardization. I am arguing that a second such pattern exists, orthogonal to the first.

I don't recall that you succeeded in describing how gold is now used, as a store of value and as a transaction hedge (the latter being a kissing cousin of use as a medium of exchange). As are many other commodities during times when major fiat currencies are being inflated, as I have described.

Indeed. The question for you to answer, however, is why the behavior of gold is so different from that of other precious metals, etc, palladium - which are perfectly suitable for the monetary role in theory, but do not exhibit the same objective behavior. Eg, stockpiles wildly at variance with any theory of commodity pricing. In any other commodity, a stockpile of 40 or so years of production would almost certainly lead to a complete cessation of new mining, not to mention a much lower price.

In other words, it is arguable that monetary effects are visible in the broad commodity markets. On the other hands, many stockpiles are at historic lows, which argues against a monetary effect. If in the next few years we see persistent stockpile growth without a price collapse, we will know that a broad monetary effect indeed exists. However, if we analyze gold alone, we see the monetary effect trivially, and it is by no means new.

Why is this? The answer, IMHO, is that a rational herd will choose gold over palladium as a surrogate money, not because of its metallurgical properties but because gold is already the leading candidate for a new standard. In other words, it is not rational for commodity investors to diversify across gold, silver, palladium, wheat, copper, etc. The rational strategy is to buy only gold.

Because there has to be one commodity which behaves as a money, but there only has to be one. Competing monetary standards are not a stable game. If you buy into a good which does not turn out to be the winner, you are merely "cornering the market," and you have to face the price collapse that will come in working off the stockpile you have built up - the "burying the corpse" problem.

If you don't follow this logic, read the post again...

As for why gold itself is not used more often directly in contracts, the primary reason is almost surely legal.

Certainly.

Where the currency inflation risk over the lifetime of the contract is high enough

Careful, again. By "inflation" I hope you don't mean CPI, which is a thoroughly meaningless number.

The subjective decision is simply a choice between holding one of two goods, one, both or neither of which may be an official currency. The only motivating factor in this decision is the change in the exchange rate between the goods across the holding period, adjusted of course by transaction costs, storage costs, etc, etc.

Price indexes, whether the CPI, the Dow, the Baltic Dry, or whatever, certainly have no place in this subjective calculation.

7:48 PM

nick said...

described an effect in which monetary standardization is the result of a pattern of subjective rational decisions which are not dependent on transaction costs.

Good grief sir, I have proven three times now that your argument is preposterously flawed. You most certainly did assume the existence of a crucial transaction cost, a point you have not even tried to refute, and thus you have proved nothing of the sort you are claiming. Please read what I wrote all over again (for the first time?) and get back to me. You also should probably bone up on the definition of "transaction costs." And please stop claiming that you have proven something you so clearly have not.

In any other commodity, a stockpile of 40 or so years of production would almost certainly lead to a complete cessation of new mining, not to mention a much lower price.

Gold has a higher ratio of monetary value to consumption value, and thus of stockpile to destructive consumption, than any other commodity. Not a big mystery, it (and silver) were traditionally used for money, and still are the first choice for those seeking to use a commodity as money. The big stockpile indicates an extraordinary ratio of monetary value to industrial consumption value (probably in the hundreds or thousands for gold), it doesn't demonstrate the absence of monetary value in other commodities. Right now I'd very roughly estimate the ratio of monetary value to consumption value for oil to be between 2:1 and 3:1, for example. (i.e. the price would be only 33% to 50% of today's price were it not for the demand for use of oil as a store of value and transaction hedge).

On the other hands, many stockpiles are at historic lows, which argues against a monetary effect.

No, it argues for inelasticity of demand and high storage costs. And many inventories have grown without declines in prices. Furthermore, for oil and other mineral "futures" the inventory is in the ground, and hasn't shrunk.

t is not rational for commodity investors to diversify across gold, silver, palladium, wheat, copper, etc. The rational strategy is to buy only gold.

Well, no. It is rational to diversify, as I have already argued, and that is in fact what we see: we see massive runups in commodity prices in reaction to expanded money supply without any corresponding big changes in the technological/geological conditionsn of supply or in industrial demand.

8:58 PM

Mencius Moldbug said...

Good grief sir, I have proven three times now that your argument is preposterously flawed. You most certainly did assume the existence of a crucial transaction cost, a point you have not even tried to refute, and thus you have proved nothing of the sort you are claiming.

You have either reverted the definition of "transaction cost" to the inability to teleport objects backward in time, or are continuing to lawyer the word "negligible." Or something else. Either way, I am entirely bemused as to the phenomenon you are referring to.

I am interested in specifics. If you can go into the analysis and show me that the subject's motivations are not as I described or the game is incorrectly analyzed, please do. Otherwise, I'm afraid I am only exacerbating your confusion.

Gold has a higher ratio of monetary value to consumption value

But where does this "value" come from? Is it a physical property of the element? Obviously not. Does it arise because gold is used as a Mengerian medium of exchange? Obviously not. Thus we seek a third explanation.

The word "value," like "inflation," is a permanent source of confusion in economic discussion. I prefer to talk of objectively measurable quantities, such as price (or better yet, exchange ratio).

Right now I'd very roughly estimate the ratio of monetary value to consumption value for oil to be between 2:1 and 3:1, for example. (i.e. the price would be only 33% to 50% of today's price were it not for the demand for use of oil as a store of value and transaction hedge).

Oil is very tricky, because it can be stored simply and very cheaply by failing to produce it. The result is that, as you point out, it's quite hard to quantify stockpiles. My understanding of the oil market, which has very unusual political connections, is poor. Perhaps yours is greater. Either way, it is not a good example, I feel.

A better case of a "normal" commodity is wheat. Wheat prices have risen considerably of late. And the wheat stockpile is very easy to quantify. There are three possibilities: either the present price is too low, too high, or just right. If it is too high, wheat supply will exceed demand and the stockpile will rise.

In other words: if a monetary effect on a commodity price does not result in inventory growth, it is not a monetary effect. Ceteris paribus, any excess "investment demand" will result in ceteris-paribus stockpile growth. Financial instruments such as futures contracts simplify various transactions, but they do not repeal the principle of supply and demand.

Well, no. It is rational to diversify, as I have already argued,

Did you even read my original post? I'm starting to suspect that you just skimmed it and did not follow the logic in detail. You have

not even started to grapple with the game theory. Which surprises me, because it is hardly complex and you are hardly dense.

9:51 PM

nick said...

You have either reverted the definition of "transaction cost" to the inability to teleport objects backward in time, or are continuing to lawyer the word "negligible." Or something else.

"Something else", a very specific something else which is by now more than obvious to anybody with any familiarity with economics who has read what I have written. I am not going to repeat myself for a fourth time, for crying out loud. You are obviously either not reading what I have written, or are deliberately ignoring it for strategic reasons. Either way, I am talking to a brick wall and there is no point in my continuing to attempt such futile communications.

12:58 PM

Mencius Moldbug said...

Believe me, Nick, I understand the concept of mental transaction costs. This falls under the category of lawyering "negligible."

What I don't understand, and what you have refused to explain, is how the existence of these negligible costs invalidates the effect I described - which is not dependent on the absence of transaction costs, negligible or nonnegligible.

1:18 PM

filc said...

Extending the coincidence-of-wants metaphor to include temporal conflicts is a pretty significant extension of the Mengerian model - I'd say you're stretching the term beyond its usefulness.

Eugene Bohm von Bawerk would disagree.

10:51 AM

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